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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/791,659	03/02/2004	Jason William Muller	FL/142	2699	
28596	7590 08/10/2005		EXAM	EXAMINER	
	TERPRISE HOLDING MILL ROAD	PHAM, MINH CHAU THI			
P. O. BOX 9			ART UNIT	PAPER NUMBER	
NEWARK,	DE 19714-9206		1724		

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary		Applicanitis	į.			
		MULLER ET AL.				
Summary	Examiner	Art Unit				
	Minh-Chau T. Pham	1724				
of this communication app	pears on the cover sheet with the c	orrespondence addres	is			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
nunication(s) filed on	•					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
4)⊠ Claim(s) <u>1-57</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
☑ Claim(s) <u>1-57</u> is/are rejected.						
7) Claim(s) is/are objected to.						
subject to restriction and/o	r election requirement.					
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
9						
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
O-892)	4) Interview Summary	(PTO-413)				
Drawing Review (PTO-948) nt(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da	te	)			
	ORY PERIOD FOR REPLETHS COMMUNICATION.  e under the provisions of 37 CFR 1.1  e under the maximum statutory period  ended period for reply will, by statute  er than three months after the mailin  ea 37 CFR 1.704(b).   nunication(s) filed on  2b) This  in is in condition for allowate  with the practice under the service of the priod of the pr	Minh-Chau T. Pham  Of this communication appears on the cover sheet with the cover sheet	Summary    Examiner			

## Specification

The abstract of the disclosure is objected to because legal phraseology "comprising" is used in the abstract. Correction is required. See MPEP § 608.01(b).

### Claim Objections

Claim 56 is objected to because of the following informalities: Claim 56 depends on claim? – missing claim number. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-12, 14-17, 19, 21-36, 38-51 and 53-56 are rejected under 35 U.S.C. 102(b) as being anticipated by George (5,507,847).

George teaches a composite filter material for removal of particles from a fluid stream comprising a membrane filtration layer comprising a porous polymeric membrane (30 in Fig. 4), at least one depth filtration media layer comprising fibers (26, 28) disposed on the upstream side of the membrane filtration member (30) wherein the membrane filtration layer comprising ePTFE (col. 2, lines 56-61). The composite filter media further comprising a support layer disposed on the downstream side of the membrane filtration layer (34 in Fig. 4, 24 in Fig. 3) wherein the support layer is laminated to the membrane filtration layer (col. 6, lines 3-7). George also teaches the membrane filtration layer and the depth filtration media layers are pleated such that the

apices of the membrane filtration layer and depth filtration layers are aligned (see 12 in Fig. 2, col. 5, line 66 through col. 6, line 7). George further teaches a composite filter (10) comprising a frame (14), a composite filter media (12) wherein the composite filter material is sealed in the frame (14) with a potting material (18) wherein the potting material (18) is selected from the group of silicone, polyurethane, plastisol or the like (col. 4, lines 3-12).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al (5,507,847), in view of Schultheiss et al (2003/0000389 A1).

Claims 1-6 and 13 call for the depth filtration media comprising fibers having an electrostatic charge. Schultheiss et al disclose a multi-layered air filter wherein the filter media comprising electrostatic charge (page 1, paragraph 0014 and 0015). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter layer with electrostatic charge as taught by Schultheiss et al in the filter apparatus of George et al since electrostatic charge is put ahead of the filter layers for simultaneous increase of the suction efficiency stability and the separation performance (see page 1, paragraph 0014).

Claims 18, 20, 37 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al (5,507,847), in view of Frey (5,522,908).

Claims 18, 20, 37 and 52 call for the filtration media comprising a pattern of perforations wherein the media layer is removable by tearing at the perforations. Frey discloses the filtration media (10, 38, 44) comprising a pattern of perforations (60, 62, 64) wherein the media layer is removable by tearing at the perforations (col. 5, lines 58-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide perforations for tearing as taught by Frey in the filter apparatus of George et al since the perforations would provide easy access for removing the filtration media off the filter frame.

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over George et al (5,507,847), in view of Schultheiss et al (2003/0000389 A1), and further in view of Frey (5,522,908).

George discloses a composite filter material for removal of particles from a fluid stream comprising a membrane filtration layer comprising a porous polymeric membrane (30 in Fig. 4), at least one depth filtration media layer comprising fibers (26, 28) disposed on the upstream side of the membrane filtration member (30) wherein the membrane filtration layer comprising ePTFE (col. 2, lines 56-61). The composite filter media further comprising a support layer disposed on the downstream side of the membrane filtration layer (34 in Fig. 4, 24 in Fig. 3) wherein the support layer is laminated to the membrane filtration layer (col. 6, lines 3-7). George also discloses the membrane filtration layer and the depth filtration media layers are pleated such that the apices of the membrane filtration layer and depth filtration layers are aligned (see 12 in Fig. 2, col. 5, line 66 through col. 6, line 7). George further discloses a composite filter (10) comprising a frame (14), a composite filter media (12) wherein the composite filter material is sealed in the frame (14) with a potting material (18) wherein the potting material (18) is selected from the group of silicone, polyurethane, plastisol or the like (col. 4, lines 3-12). Claim 57 differ from the disclosure of George in that the filtration media having electrostatic charge and perforations for tearing. Schultheiss et al disclose a multi-layered air filter wherein the filter media comprising electrostatic charge (page 1, paragraph 0014 and 0015). Frey discloses the filtration media (10, 38, 44) comprising a pattern of perforations (60, 62, 64) wherein the media layer is removable by tearing at the perforations (col. 5, lines 58-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter layer with electrostatic charge as taught by Schultheiss et al and perforations for

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tearing as taught by Frey in the filter apparatus of George et al since electrostatic charge is put ahead of the filter layers for simultaneous increase of the suction efficiency stability and the separation performance (see page 1, paragraph 0014), and perforations would provide easy access for removing the filtration media off the filter frame.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am -5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

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